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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,643	03/06/2002	Jean-Yves Villet	Q68481	6080
23373	7590	01/11/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			THERIAULT, STEVEN B	
			ART UNIT	PAPER NUMBER
			2179	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/090,643		VILLET ET AL.	
	Examiner		Art Unit	
	Steven B. Theriault		2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/28/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the following communications: The original application filed on 03/06/2002 with foreign priority of 07/12/2001.
2. Claims 1-21 are pending in the case. Claims 1 and 21 are the independent claims.
Applicant's attention is directed to the fact that a new examiner has been assigned to this case. The Examiner's name and telephone number are provided below.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: No. 18 in figure 2 and No. 114 in figure 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-8, 13-16 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wambach et al (hereinafter Wambach) U.S. Patent No. 6,097,369, issued Aug. 1, 2000 and filed Feb. 2, 1995.**

In regard to **Independent claim 1**, Wambach teaches *a method for pointing at information in a multi-dimensional space, comprising the steps of:*

- *Setting a portion of a full screen as a pointing screen;*(Wambach Figure 3 and column 2, lines 34-56 and column 4, lines 41-62) Wambach teaches a hand-mounted motion-sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen. Wambach also teaches the select function where the operator has selected the drag and click function on the glove and the corresponding action on the display is a highlighted area or box representing a selection area
- *Determining whether desired information to be pointed at is included in the set pointing screen;*(Wambach figure 3) Wambach shows the user monitoring the selected area on the video display screen.
- *When it is determined that the desired information is not included in the pointing screen, moving the pointing screen so that the desired information is included in the pointing screen; and (d) Pointing at the desired information included in the pointing screen when it is determined that the desired information is included in the pointing screen or after step (c), wherein at least one of steps (a), (c), and (d) is performed by a user's s motion in at least one direction selected from up, down, forward, backward, to the left, and to the right* (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount either up, down, left or right based on the users

hand movements. The user determines the location of the object and whether the location on the video display is adequate.

With respect to **dependant claim 2**, Wambach teaches *the full screen includes a plurality of pieces of information*. (Wambach figure 3) Wambach teaches a desktop computer system that is capable of displaying multiple pieces of information.

With respect to **dependant claim 3**, Wambach teaches the following sub-steps:

- *Determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen; (Wambach figure 3 and column 4, lines 41-67) Wambach shows the user monitoring the selected area on the video display screen to determine the movement of the selected object or menu selection.*
- *Moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the left of the pointing screen, and proceeding to step (d); and (c13) moving the pointing screen to the right so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the right of the pointing screen, and proceeding to step (d) (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount either up, down, left or right based on the users hand movements. Wambach also teaches that all of the well-known mouse functions are built into the glove and corresponding software, which would allow for creating a selection area. The user determines the location of the object and whether the location on the video display is adequate.*

With respect to **dependant claim 4**, Wambach teaches the following:

- *Determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen; (Wambach figure 3 and column 4, lines 41-67) Wambach shows the user monitoring the selected area on the video display screen to determine the movement of the selected object or menu selection.*
- *Moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the pointing screen, and proceeding to step (d); and moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the pointing screen, and proceeding to step (d) (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount either up, down, left or right based on the users hand movements. Wambach also teaches that all of the well-known mouse functions are built into the glove and corresponding software, which would allow for creating a selection area. The user determines the location of the object and whether the location on the video display is adequate.*

With respect to **dependant claim 5**, Wambach teaches the following:

- *Determining whether the desired information is located on the left or right of the pointing screen, when it is determined that the desired information is not included in the pointing screen; (c32) moving the pointing screen to the left so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the left of the pointing screen; (c33) Moving the pointing screen to the right so that the pointing screen is located at a same horizontal position as the desired information, when it is determined that the desired information is located on the right of the pointing screen; determining whether*

the desired information is included in the pointing screen moved in step (c32) or (c33) and proceeding to step (d) when it is determined that the desired information is included in the moved pointing screen; (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount to the left or right based on the users hand movements and the user monitoring the location of the pointing cursor on the display screen.

- *Determining whether the desired information is located above or below the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen; moving the pointing screen up so that the desired information is included in the pointing screen, when it is determined that the desired information is located above the moved pointing screen, and proceeding to step (d); and moving the pointing screen down so that the desired information is included in the pointing screen, when it is determined that the desired information is located below the moved pointing screen, and proceeding to step (d) (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount up or down based on the users hand movements and the user monitoring the location of the pointing cursor on the display screen.*

With respect to **dependant claim 6**, Wambach teaches the following sub-steps:

- *Determining whether the desired information is located above or below the pointing screen, when it is determined that the desired information is not included in the pointing screen; moving the pointing screen up so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located above the pointing screen; moving the pointing screen down so that the pointing screen is located at a same vertical position as the desired information, when it is determined that the desired information is located below the pointing screen; determining whether the desired information is included in the*

pointing screen moved in step (c42) or (c43) and proceeding to step (d) when it is determined that the desired information is included in the moved pointing screen; (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount up or down based on the users hand movements and the user monitoring the location of the pointing cursor on the display screen.

- *Determining whether the desired information is located on the left or right of the moved pointing screen, when it is determined that the desired information is not included in the moved pointing screen; moving the pointing screen to the left so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the left of the moved pointing screen, and proceeding to step (d); and moving the pointing screen to the right so that the desired information is included in the pointing screen, when it is determined that the desired information is located on the right of the moved pointing screen, and proceeding to step (d) (Wambach figure 3 and column 4, lines 41-67). Wambach teaches the commands to move the cursor a predetermined amount to the left or right based on the users hand movements and the user monitoring the location of the pointing cursor on the display screen.*

With respect to **dependant claim 7**, Wambach teaches *the user's motion is sensed by a sensor (Wambach column 1, lines 65-67 and column 2, lines 1-15). Wambach teaches a hand-mounted motion-sensing device.*

With respect to **dependant claim 8**, Wambach teaches *the pointing screen is moved by moving the sensor beyond at least one of a horizontal motion range and a vertical motion range, when it is determined that the desired information is not included in the pointing screen in step (c), said at least one of the horizontal motion range and the vertical motion range corresponding to at least*

one range in which the sensor can be moved to the left/right and upward/downward, respectively, to point at the desired information in step (d) (Wambach 1A, 1B and 2A, 2B and column 2, lines 62-67 and column 3, lines 1-15). Wambach teaches the horizontal and vertical movement of the sensors within the glove through threshold rotations to move the cursor on the display device.

With respect to **dependant claim 13**, Wambach teaches *the full screen corresponds to a graphical-user interface screen (Wambach figure 3). Wambach teaches a desktop computer system with a display screen is used for manipulating objects.*

With respect to **dependant claim 14**, Wambach teaches *the sensor performs a unique pointing function like a mouse (Wambach Figure 1a, 1b column 2, lines 50-56). Wambach teaches all mouse functions are performed by the switches within the glove and the user hand movements.*

With respect to **dependant claim 15**, Wambach teaches *the desired information pointed at is executed (Wambach column 4, lines 41-63). Wambach teaches the process of executing mouse functions to opening a menu or file in which the cursor is located on at the time.*

With respect to **dependant claim 16**, Wambach teaches *the sensor is included in an information input device (Wambach figures 1a, 1b, 2a, 2b, 3 and column 1, lines 65-67 and column 2, lines 1-15). Wambach teaches the use of a hand-mounted sensing device for communicating movements of a finger or wrist to a computer. The information input is the motion of the anatomical object and direction that is communicated to the computer to move an object in the direction of the motion of the hand.*

In regard to **Independent claim 21**, Wambach teaches *the method for pointing at information in a multi-dimensional space and performing functions of a mouse, the method comprising: an information selection step of creating a pointing screen at a portion of a full screen at a user's*

option such that the pointing screen includes at least one piece of information to be executed; and an information execution step of executing the information included in the pointing screen by clicking the information (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63).

Wambach teaches a hand-mounted motion- sensing device that communicates with a computer.

Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen.

Wambach also teaches the select function where the operator has selected the drag and click function on the glove and the corresponding action on the display is a highlighted area or box representing a selection area. Additionally, Wambach teaches the process of executing mouse functions to opening a menu or file in which the cursor is located on at the time.

References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

Claim Rejections - 35 USC § 103

6. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wambach et al (hereinafter Wambach) U.S. Patent No. 6,097,369, issued Aug. 1, 2000 and filed Feb. 2, 1995, in view of DeStefano et al. U.S. Patent Number 6,075,531 issued Jun.13, 2000, and filed Dec. 15, 1997.

With respect to **dependant claim 9**, Wambach teaches a hand-mounted motion- sensing device that communicates with a computer. Wambach teaches that all mouse functions including the

motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 9:

At least one of a horizontal size and a vertical size of the pointing screen is set.

Wambach does not expressly teach the ability to set the size of the pointing screen. However, DeStefano teaches a computer system capable of manipulating graphical interface components with a pointing device (DeStefano column 2, lines 44-56). DeStefano also teaches a "grip span" that is used to determine the size of the pointer area for manipulating windows (DeStefano column 9, lines 14-65). Wambach and DeStefano both teach input devices and the manipulation of images on a display screen. Additionally, DeStefano teaches that user input may be received from a mouse, trackball, joystick, light pen, touch pad, digitizing tablet and other known input devices (DeStefano column 5, lines 29-39). Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and DeStefano before him at the time of the invention was made, to modify the cursor taught by Wambach to include the adjustable proximity areas of DeStefano in order to obtain a system that is able to allow a user to adjust the size of the pointer area. One would have been motivated to make such a combination because the ability to manipulate windows within proximity of a pointer would provide advantages as taught by DeStefano.

With respect to **dependant claim 10**, Wambach teaches a hand-mounted motion-sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 10:

An initial position which is initially pointed at within the pointing screen is set.

Wambach does not expressly teach the ability to set the initial position of the pointing screen. However, DeStefano teaches a computer system capable of manipulating graphical interface components with a pointing device (DeStefano column 2, lines 44-56). DeStefano also teaches that the operation of the user-controlled pointer is set via a combination of mouse buttons, menus, toolbars or keystrokes. A mode is selected and in the resize and move modes the user sets the cursor position (DeStefano column 7, lines 1-21). Wambach and DeStefano both teach input devices and the manipulation of images on a display screen. Additionally, DeStefano teaches that user input may be received from a mouse, trackball, joystick, light pen, touch pad, digitizing tablet and other known input devices (DeStefano column 5, lines 29-39). Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and DeStefano before him at the time of the invention was made, to modify the cursor taught by Wambach to include the initial pointer location settings of DeStefano in order to obtain a system that is able to allow a user to initially set the location of the pointer area.

With respect to **dependant claim 17**, Wambach teaches a hand-mounted motion-sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 17:

Preparing a size menu used for setting said at least one of the horizontal size and the vertical size.

Wambach does not specifically teach the method of preparing a size menu for adjusting the size of the pointer area. However, DeStefano teaches the use of pop-up menus, toolbars, specific keystrokes, pull-down menus to select the selection mode (DeStefano column 7, lines 1-21). Additionally, DeStefano shows that if the move mode is used then the pointer size is determined by the "grip span" size, which can vary based on the user selections. It would have been obvious

to one of ordinary skill in the art at the time of the invention to apply DeStefano to Wambach, because of DeStefano taught advantage of utilizing selection modes and user input to determine pointer size, providing the invention of Wambach a way to allow a user to use a variety of input menu types to adjust the size of the pointer area.

With respect to **dependant claim 18**, Wambach teaches a hand-mounted motion-sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 18:

Preparing a size menu used for setting the initial position.

Wambach does not expressly teach the menu to set the initial position of the pointing screen. However, DeStefano teaches a computer system capable of manipulating graphical interface components with a pointing device (DeStefano column 2, lines 44-56). DeStefano also teaches that the operation of the user-controlled pointer is set via a combination of menu types such as: pull-downs, pop-ups, check boxes, mouse buttons, toolbars or specific keystrokes. A mode is selected and in the resize and move modes the user sets the cursor position (DeStefano column 7, lines 1-21). Wambach and DeStefano both teach input devices and the manipulation of images on a display screen. Additionally, DeStefano teaches that user input may be received from a mouse, trackball, joystick, light pen, touch pad, digitizing tablet and other known input devices (DeStefano column 5, lines 29-39). Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and DeStefano before him at the time of the invention was made, to modify the cursor taught by Wambach to include the initial pointer location settings of DeStefano in order to obtain a system that is able to allow a user to initially set the location of the pointer area.

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7. **Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wambach et al (hereinafter Wambach) U.S. Patent No. 6,097,369, issued Aug. 1, 2000 and filed Feb. 2, 1995, in view of Gregg et al. U.S. Patent Number 5,963,195 issued Oct. 5, 1999, and filed Dec. 19, 1996.**

With respect to **dependant claim 11**, Wambach teaches a hand-mounted motion- sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 11:

A speed at which the pointing screen is moved is set.

Wambach does not expressly teach the ability to set the speed at which the point screen is moved. However, Gregg teaches a graphical pointing device with a speed and accelerator function built into the device that allows for customized control of the pointer by turning or sliding the dials (Gregg column 2, lines 29-55). Wambach and Gregg both teach pointer devices and the manipulation of images on a display screen. Additionally, Gregg teaches that the speed control is built into the input device, which eliminates the need for a software component (Gregg column 2, lines 25-28). Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Gregg before him at the time of the invention was made, to modify the cursor taught by Wambach to include the speed adjustment of Gregg in order to obtain a system that is able to allow a user to adjust the movement speed of the pointer area. One would have been motivated to make such a combination because the ability to manipulate the cursor speed on the device would provide advantages as taught by Gregg.

With respect to **dependant claim 12**, Wambach teaches a hand-mounted motion- sensing device that communicates with a computer. Wambach teaches that all mouse functions including the

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motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 12:

A degree of reaction to the user's motion of a pointer displayed in the pointing screen, is set.

Wambach does not expressly teach the ability to adjust the rate of movement of which the point screen is moved. However, Gregg teaches a graphical pointing device with a speed and accelerator function built into the device that allows for customized control of the pointer by turning or sliding the dials (Gregg column 2, lines 29-55). Wambach and Gregg both teach pointer devices and the manipulation of images on a display screen. Additionally, Gregg teaches that the acceleration controls the rate of movement of the pointer (Gregg column 3, lines 45-53). Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Gregg before him at the time of the invention was made, to modify the cursor taught by Wambach to include the acceleration adjustment of Gregg in order to obtain a system that is able to allow a user to adjust the rate of movement of the pointer area. One would have been motivated to make such a combination because the ability to manipulate the cursor at varying rates on the device would provide advantages as taught by Gregg.

8. **Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wambach et al (hereinafter Wambach) U.S. Patent No. 6,097,369, issued Aug. 1, 2000 and filed Feb. 2, 1995, in view of Gregg et al. U.S. Patent Number 5,963,195 issued Oct. 5, 1999, and filed Dec. 19, 1996, in further view of Jim Boyce, "Microsoft Windows NT Workstation 4.0 user manual", 1999, pp 207-208.**

With respect to **dependant claim 19**, Wambach teaches a hand-mounted motion- sensing device that communicates with a computer. Wambach teaches that all mouse functions including the

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motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 19:

Preparing a speed menu used for setting the speed at which the pointing screen is moved.

It is the examiners interpretation that the speed of the cursor will move at a constant rate based on a setting in the menu. The rate of movement feature will either increase the constant rate or decrease the constant rate in an incremental manner. Wambach does not expressly teach the ability to adjust the speed of which the point screen is moved. However, Gregg teaches a graphical pointing device with a speed and accelerator function built into the device that allows for customized control of the pointer by turning or sliding the dials (Gregg column 2, lines 29-55). Wambach and Gregg both teach pointer devices and the manipulation of images on a display screen. Additionally, Gregg teaches that the acceleration controls the rate of movement of the pointer (Gregg column 3, lines 45-53). Gregg specifically teaches that the controls are hardware based as to eliminate the need to rely on software drivers that become outdated (Gregg column 3, lines 58-60). Gregg does not specifically teach the menu system for selecting the rate of speed. Wambach teaches that the input device mimics all mouse functions and the mouse inputs are converted at the processor by using a well know software function. It is known in the art, that the operating system software contains functions for controlling the mouse motion, pointer type and click rates. The mouse properties are adjustable via the control panel in most operating systems. Boyce shows the inherent functions within the Microsoft NT software that allows a user to adjust the pointer speed and the click speed via a menu. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and Gregg and Boyce before him at the time of the invention was made, to modify the glove taught by Wambach to include the speed adjustment of Gregg and the menu system of Boyce in order to obtain a system that is able to allow a user to adjust the speed of the pointer area via a menu or the input device. One would have been motivated to make such a combination because the ability to

manipulate the speed of the cursor at varying rates on the device would provide advantages as taught by Gregg and Boyce.

With respect to **dependant claim 20**, Wambach teaches a hand-mounted motion- sensing device that communicates with a computer. Wambach teaches that all mouse functions including the motion and click functions, are performed by the glove and user hand motions while moving a cursor on a video display screen (Wambach figure 3 and column 2, lines 34-56 and column 4, lines 41-63). Compare with claim 20:

Preparing a reaction menu used for setting the degree of reaction of the pointer.

It is the examiners interpretation that the speed of the cursor will move at a constant rate based on a setting in the menu. The rate of movement feature will either increase the constant rate or decrease the constant rate in an incremental manner. Wambach does not expressly teach the ability to adjust the rate of movement of which the point screen is moved. However, Gregg teaches a graphical pointing device with a speed and accelerator function built into the device that allows for customized control of the pointer by turning or sliding the dials (Gregg column 2, lines 29-55). Wambach and Gregg both teach pointer devices and the manipulation of images on a display screen. Additionally, Gregg teaches that the acceleration controls the rate of movement of the pointer (Gregg column 3, lines 45-53). Gregg specifically teaches that the controls are hardware based as to eliminate the need to rely on software drivers that become outdated (Gregg column 3, lines 58-60). Gregg does not specifically teach the menu system for selecting the rate of speed. Wambach teaches that the input device mimics all mouse functions and the mouse inputs are converted at the processor by using a well know software function. It is known in the art, that the operating system software contains functions for controlling the mouse motion, pointer type and click rates. The mouse properties are adjustable via the control panel in most operating systems. Boyce shows the inherent functions within the Microsoft NT software that allows a user to adjust the pointer speed and the click speed via a menu. Therefore, it would have

been obvious to one of ordinary skill in the art, having the teachings of Wambach and Gregg and Boyce before him at the time of the invention was made, to modify the glove taught by Wambach to include the speed adjustment of Gregg and the menu system of Boyce in order to obtain a system that is able to allow a user to adjust the speed of the pointer area via a menu or the input device. One would have been motivated to make such a combination because the ability to manipulate the speed of the cursor at varying rates on the device would provide advantages as taught by Gregg and Boyce.

References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Number 4,988,981 to Zimmerman et al. issued Jan.29, 1991, filed Feb.28, 1989, and discloses a computer data entry and manipulation apparatus using a glove.

U.S. Patent Number 5,489,922 to Zloof et al. issued Feb. 6, 1996, filed Oct. 13, 1994, and discloses a hand worn computer mouse.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M-F 7:00 - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2179

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SBT

BA HUYNH
PRIMARY EXAMINER